

KRZHIZHANOVSKIY, G.M., akademik; AYVAZIAN, V.G.; ALAMPIYEV, P.M.;
BUYANOVSKIY, M.S.; VARTAZAROV, S.Ya.; VEYTS, V.I.; GUVIN, F.F.;
DYMISTRASHKO, N.V.; KARAULOV, N.A.; KOCHARYAN, G.A.;
KRITSKIY, S.N.; LEBEDEV, M.M.; MURZAYEV, B.M.; FEL'DMAN, M.P.;
SHCHENGELIYAN, P.G.; ERISTOV, V.S.

Sukias Efremovich Manaserian; obituary. Izv.AN SSSR. Ser.geog.
no.5:143-144 S-0 '56. (MLRA 9:11)

(Manaserian, Sukias Efremovich, 1881-1956)

21(4)

SOV/112-59-4-7543

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4, p 155 (USSR)

AUTHOR: Vartazarov, S. Ya., and Volokhov, V. A.

TITLE: Using the Radioactive-Isotope Method for Checking Quality of Construction Work

PERIODICAL: Tr. N.-i. sektora Mosk. fil. in-ta "Orgenergostroy," 1957, Nr 1, pp 60-71

ABSTRACT: Possible methods are considered for radioactive checking of the quality of construction work at hydraulic developments. Surface and depth moisture content and concrete consistency are checked by counting the gamma quanta or slow scattered neutrons that are formed as a result of interaction between fast neutrons and a moisture-containing medium. For measuring the surface moisture content, a source and a detector, separated by a shield, are brought to the concrete surface; for depth measurements, the source is mounted in a special probe embedded in the concrete. Concrete inhomogeneity

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SOV/112-59-4-7543

Using the Radioactive-Isotope Method for Checking Quality of Construction Work

control is based on the influence of the medium density upon the intensity of scattered radiation. A scintillation counter is desirable as a detector. In checking deformations of a hydraulic structure, a radiation source with a collimator sending a narrow gamma beam is embedded in one block, while a detector in a lead container with a port is embedded in another block. The radioactive-tracer method can be used to check the quality of cementing the foundation of a hydraulic structure. The method of measuring scattered gamma radiation can be conveniently used for checking the wall thickness of penstocks and aqueducts attacked by corrosion. Recommendations are given for organizing the work of radioactive checking under field and laboratory conditions. Six illustrations.

N. V. R.

Card 2/2

FLEKSER, Ya.N.; VARTAZAROV, S.Ya., kand.tekhn.nauk, red.; SAVEL'YEV, V.I.,
red.; ~~VORONIN, K.P., tekhn.red.~~

[Checking the condition of hydroelectric installations] Kontrol'
sostoiania gidroustanovki. Moskva, Gos.energ.izd-vo, 1958.
31 p. (MIRA 12:4)
(Hydroelectric power stations--Equipment and supplies)

VARTAZAROV, Stepan Yakovlevich; FLEKSER, Ya.N., red.; MEDVEDEV, L.Ya.,
tekhn. red.

[Application of radioactive isotopes to hydraulic engineering]
Primenenie metoda radioaktivnykh izotopov v gidrotekhnike.
Moskva, Gos. energ. izd-vo, 1958. 31 p. (MIRA 11:9)
(Hydraulic engineering)
(Radioisotopes)

VARTAZAROV, S., kand. tekhn. nauk

Using radioisotopes in building. Stroitel' no.2:22-23 P '59.
(MIRA 12:5)

(Radioisotopes--Industrial applications)

VARTAZAROV, S. Ya., kand.tekhn.nauk

Using radioactive isotopes and nuclear radiations in controlling
the quality of precast concrete in building hydraulic structures.

Gidr. stroi. 30 no.11:17-21 N '60. (MIRA 13:10)
(Radiation) (Radioisotopes--Industrial applications)
(Hydraulic structures)

PETROV, N.A., red.; PETRENKO, L.I., red.; SAVITSKIY, P.S., red.; SINITSIN, V.I., red.; KOLCTYRKIN, Ye.M., red.; SYRKUS, N.P., red.; ROMM, R.F., red.; AMFYSHEV, P.I., red.; ~~VARTAZAROV, S.Ye., red.~~; ZAYTSEV, A.I., red.; ZHYZULINSKIY, V.M., red.; ZEDGINIDZE, G.A., red.; MARTYNKIN, F.F., red.; ROGACHEV, V.I., red.; SLATINSKIY, A.N., red.; LEVINA, Ye.S., vedushchiy red.; TITSKAYA, B.F., vedushchiy red.; PERSHINA, Ye.G., vedushchiy red.; IONEL', A.G., vedushchiy red.; ZARETSKAYA, A.I., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Transactions of the Conference on the Introduction of Radioactive Isotopes and Nuclear Radiation into the National Economy of the U.S.S.R.] Trudy Vsesoiuznogo soveshchaniia po vnedreniiu radioaktivnykh izotopov i iadernykh izlucheni v narodnoe khoziaistvo SSSR. Pod red. N.A.Petrova, L.I.Petrenko i P.S.Savitskogo. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol.1. [General aspects of isotope applications. Instruments with sources of radioactive radiation. Radiation chemistry. Chemical and petroleum refining industry]

(Continued on next card)

PETROV, N.A.---(continued) Card 2.

Obshchie voprosy primeneniia izotopov. Pribory s istochnikami radioaktivnykh izlucheni. Radiatsionnaia khimii. Khimicheskaiia i neftepererabatyvaiushchais promyshlennost'. 1961. 340 p. Vol.2. [Construction and the industry of construction materials. Light industry. Food industry and agriculture. Medicine] Stroitel'stvo i promyshlennost' stroitel'nykh materialov. Legkaiia promyshlennost'. Pishchevaiia promyshlennost' i sel'skoe khoziaistvo. Meditsina. 1961. 267 p.

(MIRA 14:4)

1. Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheni v narodnoye khozyaystvo SSSR. Riga, 1960.

(Radioisotopes)

(Radiation)

VARTAZAROV, S.Ya., kand. tekhn. nauk; VOLOKHOV, V.A., inzh.; OREKHOV, A.A.,
inzh.

Inspecting the quality of reinforced concrete elements using a
radiometric method. Energ. stroi. no.20:62-64 '61. (MIRA 15:1)

1. Moskovskiy filial instituta "Orenergostroy".
(Precast concrete--Testing)
(Gamma-rays--Industrial applications)

VARTAZAROV, S. Ia., kand. tekhn. nauk

"Use of radioisotopes in hydraulic engineering construction"
by M. P. Belikov, V. A. Emel'ianov, V. E. Nesterov. Reviewed by
S. Ia. Vartazarov. Gidr. stroi. 33 no. 2:60 F '63.
(MIRA 16:4)

(Radioisotopes—Industrial applications)
(Hydraulic engineering)

VARTAZAROV, S.Ya., kand. tekhn. nauk; KOROTKOV, L.I., inzh., red.
KOFEYKINA, L.V., red.

[Use of radioactive isotopes in operating electric power plants] Ispol'zovanie radioaktivnykh izotopov pri ekspluatatsii elektrostantsii. Moskva, Izd-vo "Energia," 1964. 101 p. (MIRA 17:6)

CHURAYEV, N.V.; YAKOVLEV, A.I.; VOLOROVICH, M.P.; FLEKSER, N.Ya.; VARTAZAROV,
S.Ya.

Use of isotopes and radiation sources in hydrology and hydrogeology.
Atom. energ. 18 no.3:264-268 Mr '65.

(MIRA 18:3)

V. P. Vartazarov, V. P.

86-58-3-33/37

AUTHOR: Vartazarov, V.P., Sen Lt, parachutist-instructor

TITLE: An Extension Device for Opening a Parachute (Pribor dlya distantсионного raskrytiya parashyuta)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 3, pp 82-83 (USSR)

ABSTRACT: A description of an extension device for opening a parachute is given in this short article. The main parts of the mechanism are operating springs, actuating lever, and the bowden cable. The cable connects the mechanism with the parachute pack. The mechanism is housed in an aluminum case, which is fastened to the right palm of the parachutist. The total weight of the device is 250 - 300 gr. When the actuating lever is pressed down by the fingers of the right hand, the springs are released and pull the bowden cable with a force of 25 kg. The parachute pack is opened within 0.1 sec after the pressure is applied to the lever. The author states that this device does not prevent the use of the conventional type of rip cord at the same time. One diagram.

AVAILABLE: Library of Congress
Card 1/1

VARTAZAROVA, L.S.

Some results of the introduction of trees and shrubs from
the Far East. Biul. Glav. bot. sada no.42:3-9 '61.

(MIRA 17:3)

1. Glavnyy botanicheskiy sad AN SSSR.

VARTAZAROVA, L.S.

Frost resistance of plants from the Japan-China floristic area in
Moscow. *Biul.glav.bot.sada* no.43:3-8 '61. (MIRA 15:2)

1. Glavnyy botanicheskiy sad AN SSSR.
(Moscow--Plant introduction) (Plants--Frost resistance)

VARTAZAROVA, L.S.

Fruit bearing of Far Eastern trees and shrubs in Moscow. Biol.
Glav. bot. sada no.46:30-35 '62. (MIRA 16:5)

1. Glavnyy botanicheskiy sad AN SSSR.
(Moscow--Woody plants) (Plant introduction) (Seed production)

NEKRASOV, V. I.; VARTAZAROVA, L. S.; BORODINA, N. A.

Occurrence of a monoclinal inflorescence in an introduced
Japanese white birch. Bot. zhur. 48 no.3:436-440 Mr '63.
(MIRA 16:4)

1. Glavnyy botanicheskiy sad AN SSSR, Moskva.

(Birch) (Inflorescence) (Abnormalities(Plants))

VARTAZAROVA, Ye.L., starshiy nauchnyy sotrudnik.

~~XXXXXXXXXXXXXXXXXXXX~~

New method for testing the heat resistance of glass jars.
Ref.nauch.rab.VNIIPK no.2:79-85 '54. (MLRA 9:4)
(Containers--Testing) (Glass--Testing)

Handwritten: КОТЛЯР, А.Я.; ВАРТАЗАРОВА, Я.Л.

KOTLYAR, A.Ye.; VARTAZAROVA, Ye.L

The large-scale glass container industry has developed during the years of the Soviet regime. Kons. i ov. prom. 12 no.11:1-5 H '57.
(MIRA 11:1)

1.Gipropishcheprom (for Kotlyar). 2.Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy o ovoshchesushil'noy promyshlennosti (for Vartazarova).

(Glass containers)

VARTAZARYAN, B.A., kand.med.nauk (Yerevan)

Therapeutic action of a preparation from *Helichrysum plicatum* in hepatitis and cholecystitis. *Klin.med.* 35 [i.e.34] no.1 Supplement: 20 Ja '57. (MIRA 11:2)

1. Iz kafedry farmakologii (zav. - prof. S.A.Mirzoyan) Yerevanskogo Yerevanskogo meditsinskogo instituta i instituta kurortologii i fizicheskikh metodov lecheniya (dir. - dotsent S.A.Chimarityan.
(LIVER--DISEASES)
(GALL BLADDER--DISEASES)
(BOTANY, MEDICAL)

VARTAZARYAN, B.A., assistant

Influence of a preparation from *Helichrysum lavandulaefolium* on the biligenic function of the liver. Sbor. trud. Kursk. gos. med. inst. no.13:120-121 '58. (MIRA 14:3)

1. Iz kafedry farmakologii Yerevanskogo meditsinskogo instituta. (zav. - prof. S.A.Mirzoyan) i kafedry farmakologii Kurskogo meditsinskogo instituta (zav. - dotsent A.A.Tyurina). (MARIGOLD--PHYSIOLOGICAL EFFECT) (LIVER)

VARTAZARYAN, B.A., assistant; CHEPELEVA, T.L., assistant

Influence of acute inflammation of the gall bladder on the process of bile formation. Sbor. trud. Kursk. gos. med. inst. no.13:126-128 '58. (MIRA 14:3)

1. Iz kafedry farmakologii (zav. - dotsent A.A.Tyurina) Kurskogo gosudarstvennogo meditsinskogo instituta. (GALL BLADDER--DISEASES) (LIVER)

VARTAZARYAN, B.A., assistant

Prolonged observations on pancreatectomized dogs without the introduction of insulin and other preparations from the pancreas. Sbor. trud. Kursk. gos. med. inst. no.13:134-136 '58.

(MIRA 14:3)

1. Iz kafedry farmakologii (zav. - dotsent A.A. Tyurina) Kurskogo gosudarstvennogo meditsinskogo instituta.

(PANCREAS--SURGERY)

(LIVER)

SHMAVONYAN, Dzh.M.; VARTAZARYAN, B.A.

Influence of Ankavan mineral water on the biligenic function of the
liver. Vop.kur.,fizioter.i lech.fiz.kul't. 25 no.1:33-34 '60.

(MIRA 13:5)

1. Iz Instituta kurortologii i fizicheskikh metodov lecheniya
Armyanskoy SSR (dir. S.A. Chshmarityan).

(ANKAVAN--MINERAL WATERS) (LIVER)

VARTAZARYAN, B.A., dotsent

The life-span in dogs following a ligation of the common bile duct and the ducts of the pancreas. Spor. trud. Kursk. gos. med. inst. no.16:159-160 '62. (MIRA 17:9)

1. Iz kafedry farmakologii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent B.A. Vartazaryan) Kurskogo meditsinskogo instituta.

VARIAN, L.A.

Dissertation: "Damage and Washout of Canals; Prevention and Control of Damages (Irrigation Systems)." Cand Tech Sci, Tashkent Inst of Engineers of Irrigation and Mechanization of Agriculture (TIIMASKh), 29 Jun 54. (Pravda Vostoka, Tashkent, 8 Jun 54)

SO: SUM 318, 23 Dec 1954

VARTAZAR'YAN, L.A.

Protection of irrigation canals. Trudy TIIIMSKH no.8:70-95
'57. (MIRA 15:5)
(Irrigation canals and flumes)

VARTAZAR'YAN, L.A.

Organizing the operation of the Kirov main canal on the basis
of a new technique. Mat. po proizv. sil. Uzb. no.15:337-346
'60. (MIRA 14:8)

1. Tashkentskiy institut inzhenerov irrigatsii i mekhanizatsii
sel'skogo khozyaystva.
(Golodnaya steppe---Irrigation canals and flumes)

VARTBARONOV, O.R.

BERGMAN, A.G.; VARTBARONOV, O.R.

Fusibility diagram of the ternary system consisting of chromates, potassium meta- and tetraborates. Zhur. neorg. khim. 2 no.3:642-647 Mr '57. (MLRA 10:5)

1. Rostovskiy n/D institut inzhenerov zheleznodorozhnogo transporta.

(Systems (Chemistry)) (Alkali metal chromates)
(Potassium borates)

DARONOV, O. R.

AUTHORS: Bergman, A. G. and Vartbaronov, O. R.

78-3-23/35

TITLE: Fusion Diagram for the System Consisting of Chromates and Tetraborates of Sodium and Potassium. (Diagramma plavkosti sistemy iz khromatov i tetraboratov natriya i kaliya.)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, Vol.II, Nr.3, 1957, pp. 648-654. (USSR)

ABSTRACT: The system studied is the side face of the prism representing the composition $K, Na||CrO_4BO_2, B_4O_7$. The visual-polythermal method was used, with energetic stirring throughout experiments. The system was found to be reversibly-reciprocal with two immiscibility regions, and is the first representative of the type. The liquidus surface of the system consists of two crystallisation fields of a continuous series of solid solutions of chromates (89.1%), and tetraborates of potassium and sodium (10.9%). There is a minimum corresponding to $664^\circ C$ and 54% $Na_2B_4O_7$, 10% K_2CrO_4 , 36% $K_2B_4O_7$ on the curve of the co-crystallisation of

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Fusion Diagram for the System Consisting of Chromates and
Tetraborates of Sodium and Potassium.

78-3-23/35

the continuous series of solid solutions. Two
isolated regions of immiscibility have been found.
There are 6 tables, 7 figures and 3 references, of
which 1 is Slavic.

ASSOCIATION: The Railway Transport Engineers Institute, Rostov
on Don. (Rostovskiy n/D institut inzhenerov
Zheleznodorozhno transporta.)

SUBMITTED: July 12, 1956.

AVAILABLE: Library of Congress.

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VARTBARONOV, O.R.
BERGMAN, A.G.; VARTBARONOV, O.R.

The irreversibly reciprocal system of sodium and potassium chromates
and metaborates. Zhur. neorg. khim. 2 no.11:2641-2648 N '57.
(MIRA 11:3)

1. Rostovskiy-na-Donu institut inzhenerov zheleznodorozhnogo transporta.
(Alkali metal chromates) (Potassium borates)
(Sodium borate)

VARTBARONOV, O. R.

AUTHORS: Bergman, A. G. and Vartbaronov, O. R.

78-3-22/35

TITLE: Fusion Diagram for the Ternary System Consisting of the Chromate, Meta- and Tetraborates of Potassium.
(Diagramma plavkosti troynoy sistemy iz khromata, meta- i tetraboratov kaliya.)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1957, Vol.II, Nr.3, pp. 642-647. (USSR)

ABSTRACT: The present work represents the start of a study of the mutual reaction of the chromates, metaborates and tetraborates of potassium and sodium in melts in connection with the development of baths for the treatment of metals. The ternary system dealt with is the base of the prism representing the compositions K^+ , $Na^+ || CrO_4^{2-}$, BO_2^- , $B_4O_7^{2-}$; in it occur complex formation, the separation of components into two liquid phases and the formation of glasses. Visual-polythermal methods were used to show the existence of an incongruent compound for which the composition $2K_2O \cdot 3B_2O_3$ is proposed, which appears to be an inter-

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Fusion Diagram for the Ternary System Consisting of the
Chromate, Meta- and Tetraborates of Potassium.

78-3-22/35

mediate type of compound between potassium metaborate and tetraborate, and which becomes congruently-melting within the system. The region in which separation into two layers occurs in the crystallisation field of K_2CrO_4 has been delineated. The system contains two ternary eutectic points, and shows simultaneous complex formation, separation into layers and glass formation. There are 6 figures, 4 tables and 4 references, all of which are Slavic.

ASSOCIATION: The Railway Transport Engineers Institute, Rostov on Don. (Rostovskiy n/D institut inzhenerov Zheleznodorozhnogo transporta.)

SUBMITTED: July 2, 1956.

AVAILABLE: Library of Congress.
Card 2/2

VARTBARONOV, O.R., dotsent, kand. khim, nauk; BERGMAN, A.G., prof.,
~~doktor khim. nauk~~

External elements of the prism of the composition of the
Na,K||CrO₄,BO₂, B₄O₇. Trudy RIIIZHT no.28:156-168 :59.
(MIRA 16:7)
(Systems (Chemistry)) (Salts)

VARTBARONOV, O.R., dotsent, kand. khim. nauk; BERGMAN, A.G., prof.,
doktor khim. nauk

Inner cross sections through the prism of the composition of
the Na₂K||CrO₄, BO₂, B₄O₇ system. Trudy RIIZHT no.28:169-
180 '59. (MIRA 16:7)

(Systems (Chemistry)) (Salts)

GERTSYK, I.R., dotsent; VERNIDUB, F.I., dotsent; VARTBARONOV, O.R., dotsent.

Batching precipitating agents in treating water inside low-pressure
vertical-cylindrical boilers. Trudy RIIZHT no.19:51-59 '55.
(Locomotive boilers) (MIRA 9:7)

BUKOV, V.A., BYKOV, L.A., VALUK, V.A., VARTBARONOV, R.A., ZHILIS, E.F.,
KONDRAKOV, V.M., FUZ'MIN, V.A., SYCHEV, G.I. PROLOV, N.I.,
FOKIN, A.S., KHARINSKIY, A.N. (Saratov)

New method for producing stable neurogenic hypertension in dogs
[with summary in English]. Arkh.pat. 20 no.5:21-27 '58 (MIRA 11:6)
(HEART, anatomy and histology,
thebesian vessels, review (Rus))

VARTBARONOV, R.A., starshiy leytenant med.sluzhby

Radiation in a plane cabin. Voen.-med. zhur. no. 2:83-84 F '61.

(MIRA 14:2)

(AVIATION MEDICINE) (RADIATION—PHYSIOLOGICAL EFFECT)

ACCESSION NR: AT4042700

S/0000/63/000/000/0339/0343

AUTHOR: Lebedinskiy, A. V.; Arlashchenko, N. I.; Busygin, V. Ye.; Vartbaronov, R. A.; Veselov, A. S.; Volokhova, N. A.; Grigor'yev, Yu. G.; Yemel'yanov, M. D.; Kalyayeva, T. V.; Krylov, Yu. V.; Polyakov, B. I.; Farber, Yu. V.

TITLE: Effects of Coriolis accelerations on the human organism

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsonnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 339-343

TOPIC TAGS: vestibular analyzer, cosmonaut selection, cosmonaut training, semi-circular canal, acceleration, rotation, nystagmus, optical analyzer, Coriolis acceleration

ABSTRACT: Studies of the effect of prolonged Coriolis accelerations on the human organism must be made as a preliminary step toward the creation of artificial gravity in spaceships. Studies were performed in a slowly rotating MBK-1 chamber (a cylindrically shaped room 2.1 m in diameter and 2.3 m high, equipped with two armchairs). In the first series of experiments, 13 healthy persons were subjected

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ACCESSION NR: AT4042700

to prolonged rotation of 1 to 5 hours at an angular velocity of 5.3°/sec. In the second series of experiments, 4 subjects were rotated for 24 hours at angular velocities of 5.3, 10.6, and 21.2°/sec. Coriolis accelerations were created periodically by tilting the body and head in a plane perpendicular to the plane of rotation of the chamber at the rate of 1 movement/sec. Prolonged stay of subjects with normal vestibular sensitivity under conditions of rotation at 5.3, 10.6, and 21.2°/sec resulted in functional changes in the condition of the central nervous system and the cardiovascular system, and in disruption of the body temperature control and the balancing function. The degree of vegetative disorders was found to be directly proportional to the speed of rotation and the degree of vestibular sensitivity of the subjects. During cumulative action of Coriolis accelerations, the majority of the subjects developed an adaptation which was noted from 1 to 5 hours after beginning of the rotation. On the basis of the results obtained, the method of prolonged slow rotation is recommended for training purposes.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 2/2

AUTHOR: Vartbaronov, R. A.; Volokhova, N. A. 26
B

TITLE: Characteristics of the adaptation of man to the prolonged effects of Coriolis acceleration 2

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 4, 1965, 500-506

TOPIC TAGS: Coriolis acceleration, human adaptation, biological effect, nystagmus, motion sickness, vestibular apparatus, etc.

ABSTRACT: Previous experiments by the author on human adaptation to Coriolis acceleration showed that the extent of motion sickness depends on the speed of rotation of the room and on the degree of vestibular sensitivity of the subjects. In this work 11 subjects (3 with lowered vestibular sensitivity) were placed in a rotating room (0.9, 1.18, and 3.5 rpm) for 4, 24, and 72 hr. Vestibular reactions were tested in a variety of ways: by electrothermics, electrocardiography and capillaroscopy (vestibular-autonomic reactions), electronystamography, and filming of head movements (vestibular-acoustic reactions). Vestibular-ear-ear reactions were determined from the subjects' answers to questions. Typical vestibular-autonomic nystag-

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toms included headaches, weakness, loss of energy, somnolence, and limitation of motor and mental activity. These phenomena developed in people with lowered vestibular sensitivity 20-30 min after the beginning of rotation at 3.5 rpm and disappeared completely in 2-7 hr, in subjects with normal vestibular sensitivity the symptoms appeared in 5-7 hr at 3.5 rpm and disappeared after 20-40 hr. A motion sickness (shivering, vomiting, tachycardia, etc.) occurred only in subjects with lowered vestibular sensitivity at 3.5 rpm. The tendency to adaptation under the influence of rotation was observed in a number of physiological indices, including skin thermometry and cardiac and other indices, which first decreased and then increased. Similar changes were observed in the indices of adaptation including working capacity, peripheral blood circulation, and vestibular adaptation reactions such as nystagmus. Aftereffects (for 1-3 days) consisting of headache, somnolence, and nausea while traveling indicate readaptation of the organism to life conditions.

ASSOCIATION none

Card 2/3

L 63547-65

ACCESSION NR: AP5017762

SUBMITTED: 09Sep64

ENCL: 00

SUB CODE: 15

NO REF SOV: 008

OTHER: 007

ATD PRESS: 4050

Card ^{dm} 3/3

R

ACCESSION NR: AT4042720

S/0000/63/000/000/0504/0507

AUTHOR: Yuganov, Ye. M.; Markaryan, S. S.; Bryanov, I. I.; Sidel'nikov, I. A.; Vartbaronov, R. A.

TITLE: Methods of vestibular testing

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 504-507

TOPIC TAGS: Coriolis acceleration, vestibular analyzer, angular acceleration, linear acceleration, disorientation, spatial orientation, vestibular mechanism, vegetative reaction/Barani chair

ABSTRACT: The angular, Coriolis, and linear accelerations to which aircraft pilots and cosmonauts are subjected effect the vestibular analyzer. This gives rise to two types of vestibular reactions. The first is an illusory one, which can lead to disorientation in space, and the second can cause vestibular-vegetative reactions which bring about a deterioration of general well-being. This

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ACCESSION NR: AT4042720

means that methods of vestibular selection must be sufficiently reliable to be able to predict the appearance of these vestibular reactions in flight. The selection methods developed by us are based on the interaction of reflexes between afferent systems. The method of determining the threshold of sensitivity of the vestibular mechanism to the illusion of banking is performed on a special chair with unstable supports. The subject sits on this chair with his eyes closed while one of his vestibular mechanisms is stimulated by a 10-cps current for periods of 3 and 10 sec. If the subject fails to incline his body, the current is gradually increased (but not to exceed 3 mamp) until the desired inclination of the body in the direction opposite to the stimulated labyrinth is obtained. A second type of experiment is performed under similar conditions but with the eyes open and fixed on a small lighted bulb placed 60 cm away along the center line on the level of the eyes. The amount of current required to induce a sensation of banking in the direction of the stimulated labyrinth is measured. The difference between the amount of current required to produce this with the eyes closed and the amount required to produce the same sensation with the eyes open represents the magnitude of the inhibiting effect of the visual analyzer on the vestibular analyzer. The degree of motor reaction which accompanies the illusion is recorded on an oscil-

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ACCESSION NR: AT4042720

lograph. Sensitivity to illusions of inclination is characterized by the amount of the current during the combined action of the stimulator for a 10-sec period. On the average it varies between 1.5 and 2.5 mamp. A current of less than 1.5 mamp indicates an increased sensitivity to illusions of banking in flight. In order to test the ability of the motor analyzer to exert an inhibiting effect on vestibular reactions, the subject, with his eyes closed, is rotated clockwise (10 turns in 20 sec), and three minutes later he is rotated for a similar period counter-clockwise. After each period of rotation, the chair is brought into an unstable position. Persons who are likely to lose their sense of orientation in flight experience a pronounced sensation of counter-rotation, lose their sense of balance for a period of thirty or more seconds, accompanied by complete spatial disorientation and the appearance of vestibular reactions for 10 to 15 sec. This method of evaluation of the tendency of pilots to lose their sense of spatial orientation has proved to be 80% effective, as compared with older methods which were only 25% effective. The degree to which vegetative reactions appear, due to the effects of intermittent Coriolis accelerations on the vestibular analyzer, is determined by tests on a Barani chair, which is rotated at the rate of 180° per sec for a period of 20 sec while the subject, with eyes closed, bends his head rhythmically to one side at the rate of 16 times per 20 sec. At the moment the chair stops

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the subject is requested to hold his head straight and to open his eyes. The subject is examined for signs of vegetative reactions (paleness, sweatiness, vomiting). If these signs are absent, a similar test is performed with rotation in the opposite direction. If signs of vegetative reactions do not appear, experiments are continued with variations. The subject is asked to bend his trunk forward 8 times in a 20-sec period instead of moving the head sidewise. The interval between rotations should not exceed one minute. If at any stage of this procedure paleness, sweatiness, or nausea appears, the subject should be considered unfit for flight school. A second test of tolerance to Coriolis accelerations is performed with the subject seated on a Barani chair which is rotated at the rate of 180° per sec while the subject moves his head forward and back through an arc of 35° . The time of onset of vegetative disorders is recorded. Persons with stable vestibular analyzers require 4 to 6 minutes before vegetative disorders appear. In persons with unstable vestibular analyzers, who are unfit for flight training, these symptoms arise after one or two minutes. A third method of testing tolerance to cumulative Coriolis accelerations is the so-called two-minute test. The subject, with eyes closed, is rotated on a Barani chair at the rate of 180° per sec for one minute. During this time he inclines his trunk forward and back every 5 sec on command. After 50 sec the experiment is performed with rotation in the opposite

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ACCESSION NR: AT4042720

direction. Signs of vegetative reactions and subjective sensations are recorded. This test, performed on 200 subjects, has indicated that persons who can withstand the two-minute Coriolis test can withstand other forms of acceleration tolerance tests. It was found that these three methods of testing stability to Coriolis accelerations are capable of revealing hidden forms of vestibular-vegetative disruptions which cannot be determined by the standard tests.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE:LS

NO REF SOV: 000

OTHER: 000

Card 5/5

AUTHOR: Varlbaronov, R. A.

TITLE: Some vascular reactions of man caused by the effect of Coriolis accelerations

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 1, 1965, 18-22

TOPIC TAGS: Coriolis acceleration, vascular system, man, vascular reaction

ABSTRACT: Experiments were performed with 14 persons, 8 subjects with normal vestibular sensitivity and 6 with heightened vestibular sensitivity. Coriolis accelerations were achieved by means of a rotating chair which revolved at an angular velocity of 60° — 180° per sec while the subjects inclined their heads or bodies in accordance with a programmed rhythm and amplitude. The duration of the experiment equaled the time of cumulation (until the appearance of the first vestibular-vegetative symptoms), but did not exceed 20 min. Arterial pressure was registered by the oscillometric method, while the linear speed of the blood flow was measured by

ACCESSION NR: AP5003697

0

accelerations bring on the motion sickness syndrome and cause a specific increase
in the tone of the arterial press. ...

ACC NR: AT6003868

SOURCE CODE: UR/2865/65/004/000/0343/0348

AUTHOR: Vartbaronov, R. A.

ORG: none

TITLE: Effect of small Coriolis accelerations on the functional state of the human heart

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 343-348

TOPIC TAGS: man, cardiovascular system, vestibular effect, space physiology, physiologic parametor, biologic acceleration effect

ABSTRACT: The chronic effects of small magnitudes of Coriolis accelerations on human cardiac activity are analyzed. The investigations were conducted on an MVK-1 stand; the 4 subjects were exposed to magnitudes of 0 (control), 5.3, 10.6, and 21.2°/sec. The vestibular sensitivity of the subjects varied. Fig. 1 reflects some results of the tests.

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L 14284-66

ACC NR: AT6003868

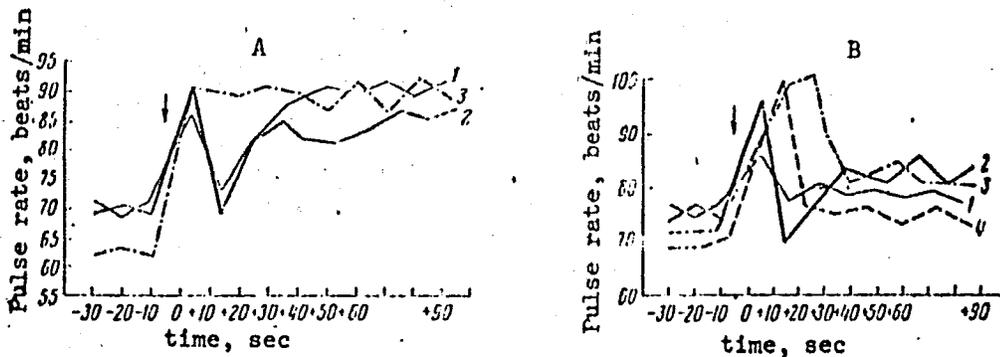


Fig. 1. Change in pulse rate in an orthostatic test during prolonged rotation

A - Subject A; B - subject B; 1 - at 0°/sec; 2 - at 5.3°/sec; 3 - at 21.2°/sec; 4 - at 10.6°/sec

(Arrow denotes the beginning of standing position).

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L 14284-66

ACC NR: AT6003868

The cumulative effects of small Coriolis magnitudes did not produce any pathological changes, and any deviations observed were judged to be within physiological norms. Magnitudes of $10.6^\circ/\text{sec}$ had a sympathetic influence on cardiac activity, while the effects of $21.2^\circ/\text{sec}$ were mainly parasympathetic, changing to a pronounced sympathetic effect during functional tests. This effect was probably due to decreased cardiac functional ability induced by extracardial factors. Even when subjective sensations such as nausea were encountered, physiological deviations in cardiac activity were not great. It is proposed that any danger thereof reflected a nonspecific stress reaction to rotation which takes place in higher autonomic centers. The investigations attest to the high adaptability of human heart muscle to vestibular stimuli, a conclusion which concurs with the results of other studies. Orig. art. has: 2 figures. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 011 / OTH REF: 007

Card 3/3

VARTBARONOV, R.A.

Effect of small-rate Coriolis acceleration on the functional
state of the human heart. Probl. kosm. biol. 4:343-348 '65.
(MIRA 18:9)

L 21542-66 EWT(1) SGTB DD

ACC NR: AP6007883

SOURCE CODE: UR/017/66/000/002/0065/0067

AUTHOR: Markaryan, S. S. (Lieutenant colonel in medical service; Candidate of medical sciences); Vartbaronov, R. A. (Major in medical service)

18
B

ORG: none

TITLE: The use of skin thermometry to evaluate vestibular-autonomic reactions

SOURCE: Voenno-meditsinskiy zhurnal, no. 2, 1966, 65-67

TOPIC TAGS: vestibular analyzer, Coriolis acceleration, acceleration effect, autonomic nervous system

ABSTRACT: Existing methods of vestibular selection (Barani chair, Khilov swing, etc.) are inaccurate predictors of vestibular-autonomic disturbances occurring in flight. Experiments were conducted to determine whether thermal reactions to Coriolis accelerations provide a better index of vestibular disturbances. The subjects were 16 men aged 18-32, six of whom had low natural vestibular tolerance. Coriolis accelerations were created by inclining the head or trunk forward (30° and 90° respectively) 30 times per minute with eyes closed while the chair was rotating at 60° or 180°/sec. The combined effect of Coriolis accelerations (rotation rate 180°/sec) and optokinetic stimulation (17 stripes/sec) was also tested. Individual tests lasted up to 20 min, depending on the time of appearance of motion sickness symptoms. The skin temperature of forehead, wrists, and shins was recorded during and after rotation. Two control studies were conducted with minimal vestibular

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L 21542-66

ACC NR: AP6007883

Table 1. Average changes of temperature of forehead skin during the cumulative effect of Coriolis accelerations of different intensity

Rotation rate of chair in °/sec	Angle of inclination of head-trunk (in °)	Degree of vestibular tolerance (according to Voyachek's otolithic test)	Number of subjects	Number with manifestations of motion sickness	Latent period of motion sickness	Average initial temperature	Average difference in temperature of forehead skin (in °C)	
							During rotation	In the minute after rotation
0	30	0-I	6	0	—	34,2	+0,8±0,2	+0,9±0,3
0	90	II-III	6	0	—	34,0	+0,9±0,2	+1,0±0,2
		0-I	6	0	—	34,7	+0,3±0,2	+0,5±0,4
60	30	II-III	6	0	—	34,5	+0,4±0,3	+0,4±0,2
		0-I	4	1	13 min	34,9	+0,1±0,6	0±0,8
180	30	II-III	4	4	9min ± 4 1/2 min.	34,9	-0,3±0,6*	-0,2±0,3*
		0-I	10	9	5,2 min. ± 2 min	33,4	-0,9±0,7	-1,0±0,8
180	90	II-III	6	6	40 sec ± 32 sec	33,7	-0,7±1,1	-0,7±1,1
		0-I	6	6	5 min ± 3 min	34,0	-0,8±0,3	-0,8±0,4
		II-III	6	6	40 sec ± 27 sec	34,0	-0,6±0,5	-0,6±0,3

1. In the majority of cases the same people participated in different series of investigations.

2. The reliability of temperature changes depending on the rotation rate in all cases is more than 99%.

* The reliability of differences in the degree of vestibular tolerance is more than 99%.

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L 21542-66

ACC NR: AP6007883

stimulation: in one variant head inclinations were performed without rotation, and in the other the subject was rotated with his head immobilized. Experimental results showed vestibular-autonomic disturbances with varying degrees of severity in most subjects exposed to Coriolis accelerations. Results of one phase of the experiment are given in Table 1. With the appearance of motion sickness, recovery of skin temperature took 10—15 min after cessation of rotation (compared with 2—3 min in the controls). It should be noted that the combined effect of Coriolis acceleration and optokinetic stimulation produced less thermal reaction than acceleration alone. The skin-thermometry method can be recommended for determining the degree of vestibular-autonomic disturbance under the accumulated influence of Coriolis accelerations. This method is distinguished by the fact that the decrease in skin temperature depends not so much on the degree of vestibular tolerance as on the appearance of a motion sickness syndrome, and the force and duration of the vestibular stimulus. Orig. art. has: 1 table. [JS]

SUB CODE: 06/ SUBM DATE: none/ ATD PRESS: 4219

Card 3/3 BKG

L 25972-66 FSS-2/EWT(1)/EEC(k)-2/EWA(d) SCTB TT/DD/GW

ACC NR: AP6015410 SOURCE CODE: UR/0216/66/000/003/0337/0345

AUTHOR: Kotovskaya, A. R.; Yeshanov, N. Kh.; Vartbaronov, R. A.; Simpura, S. F. 51
13

ORG: none

TITLE: Physiological reactions of cosmonauts under the influence of acceleration
during the Voskhod-1 flight 2

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 3, 1966, 337-345

TOPIC TAGS: space flight, physiological change, cardiovascular system, electro-
cardiogram, weightlessness effect, acceleration effect

ABSTRACT: Physiological data from the Voskhod-1 flight were compared with preflight
centrifuge data for all three cosmonauts. Comparison of laboratory pulse rates with
pulse rates recorded during the prelaunch period showed higher prelaunch values for
cosmonauts Komarov and Yegorov, but a lower value for Feoktistov. After launch,
pulse and respiration rates continued to climb, reaching maximum values in the first
20-30 sec of flight, though acceleration forces at this point were small. During
centrifuge tests the height of the T spike of electrocardiograms decreased with
increased acceleration; however, the T spike decreased independent of changes in the
magnitude of acceleration for all cosmonauts during spaceflight. Furthermore,
recovery of the original T spike value during insertion into orbit occurred later
than in centrifuge tests. This is apparently caused by a slower recovery process by

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UDC: 612.2:612.3:629.195

L 25972-66

ACC NR: AP6015410

the myocardium during spaceflight. Physiological shifts observed during spaceflight were similar in pattern to shifts noted during centrifuge tests, except that the degree of shifts in spaceflight was somewhat higher. This is probably due to greater emotional stress during spaceflight. The dynamics of physiological changes during the reentry stage of the Voskhod-1 flight showed considerable individual fluctuations, caused by changes in the reactivity of the organism more as a result of the preceding weightlessness than of emotional stress. The effect of weightlessness on the ability of the organism to endure subsequent accelerations is of great interest and can be studied further by comparing spaceflight data with centrifuge data. Orig. art. has: 1 table and 7 figures. [JS]

SUB CODE: 06/ SUBM DATE: 02Dec65/ ORIG REF: 001/ OTH REF: 007/ ATD PRESS: 4257

Card 2/2 FW

L 39798-66 ENT(1) SCTB DD/GE-2

ACC NR: AP6011412

SOURCE CODE: UR/0216/66/090/002/0221/0229

AUTHOR: Markaryan, S. S.; Vartbaronov, R. A.

ORG: none

TITLE: Comparative characteristics of autonomic reactions to some cumulative methods of stimulating the vestibular analyzer

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 2, 1966, 221-229

TOPIC TAGS: vestibular analyzer, vestibular stimulus,
human physiology, vestibular training

ABSTRACT: The author conducted three series of detailed tests using the Markaryan-Shchukin vestibulometer (1961). Table 1 shows the various test parameters. The experiments were conducted on 26 subjects aged 20-33, 7 of whom had second- and third-degree lowered vestibular stability. The physical parameters of the stimuli were measured by recording the angular velocity of the vestibulometer and the rate of head motion in two planes on an oscillograph using accelerometric sensors. To

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UDC: 611.85:629.195

ACC NR. AP6011412

Table 1.
Basic parameters of vestibular stimulation as a function of the test series:

I	2	3	4*	5	6	7	8	9	10	11
I	1	0	30	30	0	0	—	—	0	13
	2	0	90	15	0	0	—	—	0	11
	3	60	30	30	0,008	0	—	—	0,028	11
	4	180	30	30	0,07	0	—	—	0,07	15
	5	180	30	30	0,03	0	—	—	0,07	8
	6	180	30	6	0,07	0	—	—	0,07	5
	7	180	90	15	0,56	0	—	—	0,35	11
II	1	0	0	—	0,2-0,3	0	16	—	0	71
	2	10-180	0	—	0	$\pm 12,9$	2,5	—	0	12
	3	10-180	0	—	0,2-0,3	$\pm 12,9$	16 и 2,5	—	0	10
III	1	130	0	—	0	0	—	11	0	9
	2	10-180	0	—	0	$\pm 12,9$	2,5	1-17	0	12
	3	180	30	30	0,07	0	—	17	0,07	11

I - Series no.; 2 - subseries no.; 3 - head; 4 - inclination angle in degrees*; 5 - frequency of head inclinations, min; 6 - maximum linear G's; 7 - angular acceleration, degrees/sec; 8 - cycles/min; 9 - stripe flicker frequency during optokinetic stimulation in sec; 10 - maximum value of Coriolis acceleration, G; 11 - no. of tests

*Head always inclined forward except in series I, subseries 5

L 20798-66

ACC NR: AP6011412

determine physiological responses, EKG's, SCG's, pneumograms, brachial arterial pressure, capillaroscopy, blood flow rate (determined oxyhemometrically), and skin temperature of the forehead, hands, and legs were recorded along with visual observations and interrogations. Some results of the tests are shown in Table 2. The experiments showed that the character and degree of changes in autonomic reaction indexes in response to the cumulative action of adequate stimuli correspond to the severity of motion sickness. The best indexes of motion sickness are change in complexion, increased pulse rate, decreased erythrocyte movement, and reduction of the heat circulation index in the region of the head. Of the various methods

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ACC NR: AP6011412

1	2	3	4			8		
			5	6	7	9	10	
I	1,2	I	10	0	0	>20	10	
		II	6	0	0	>20	6	
	3	I	5	1	0	13	1	
		II	0	1	5	>20	5	
	4,5,7	I	0	1	19	0±4,5	6	
		II	0	1	19	4,4±2,2	20	
	1	I	0	0	14	0,65±0,4***	14	
		II	3	0	0	>20	3	
	II	2	I	4	0	0	>20	4
			II	7	0	0	>20	7
3	I	3	2	0	12	2		
	II	5	0	0	>20	5		
I	1	I	4	0	0	13	1	
		II	4	1	0	>20	4	
2	1	I	4	0	0	>20	4	
		II	3	1	1	0	2	
III	3	I	3	2	3	10,8±3,3	6	
		II	0	1	3	>20	2	
III	3	I	0	0	6	5,5±4,4**	4	
		II	0	0	5	3,5±1,4	6	
					1,3±1,1*	5		

Table 2. Dependence of some motion sickness parameters on the character and degree of vestibular stimulus

1 - Series no.; 2 - subseries no.;
 3 - degree of vestibular stability;
 4 - severity of motion sickness;
 5 - lacking; 6 - mild; 7 - severe;
 8 - latent period; 9 - effect duration, min; 10 - no. of cases;

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	11		14		17
	12	13	15	16	
>20	10	—	—	0	—
>20	6	—	—	0	—
>20	6	—	5	1	1
10±5,3	6	—	5-12	6	1
0,4±4,2	19	—	15-30	19	1
>20	1	—	—	—	—
1,7±0,6***	14	—	25-3 часа	14	0
>20	3	—	—	0	—
>20	4	—	—	0	—
>20	7	—	—	0	—
>20	5	—	—	0	2
>20	5	—	—	0	—
>20	5	—	—	0	0
>20	4	—	—	0	—
12	1	—	2	1	1
>20	4	—	—	—	—
15±3	4	—	5-10	3	2
>20	4	—	—	—	—
8,2±3**	3	—	10-25	3	1
>20	1	—	—	—	—
0,2±3	6	—	10-25	6	0
1,5±1,6*	5	—	30-1 час	5	0

Table 2. continued

11 - tolerance time; 12 - duration, min; 13 - no. of cases; 14 - after-effects; 15 - duration, min; 16 - cases; 17 - sign of adaptation.

Explanation: II-group with lowered vestibular stability. Significance of differences between I and II groups: error less than 0.001***; 0.01**; 0.05*.

Card 5/6

ACC NR: AP6011412

tested, the accumulation of Coriolis accelerations is recommended for assessing individual vestibulo-autonomic stability in humans. Orig. art. has: 3 tables. [CD]

SUB CODE: 05, 06/ SUBM DATE: 20Jun65/ ORIG REF: 019/ OTH REF: 005/ ATD PRESS:

4231

Card 616MLP

VART-BARONYAN, V.

"Discussing a mar. of culture" by A. Perventsev. Reviewed by
V. Vart-Baronian. Sov. profsoiuzy 7 no.17:59-61 S '59.
(Communist education) (MIRA 12:11)
(Perventsev, A.)

ALEKSEYEV, A.; VART-BARONYAN, V.

Fence, reason and the truth will prevail ("Face to face with
America." Reviewed by A.Alekseev, V.Vart-Baronian). Sov.
Profsoiusy 8 no.2:41-44 Ja '60. (MIRA 13:2)
(Russia--Foreign relations--United States)

SUVOROVA, Lidiya Il'inichna; KASSIROV, Leonid Nikolayevich; VART-BARONYAN, V.,
red.; KLEPACH, N., red.; SHLENSKAYA, M., tekhn. red.

[Knowledge and know-how; collection of articles on the economics of
socialist agriculture] Znat' i umet'; sbornik statei po ekonomike
sotsialisticheskogo sel'skogo khoziaistva. Moskva, Izd-vo TsK VLKSM
"Molodaia gvardia" 1961. 189 p. (MIRA 14:12)
(Agriculture--Economic aspects)

VARTEK, Eduard, komandir korablya

Weight of the airplane, temperature, air density; wind velocity and
component; their effect on the take-off. Grazhd.av. 18 no.12:7
D '61. (MIRA 15:1)

(Airplanes--Take-off)

MJKULIK, Ivan, velitel letadea IL-18; VARTEK, Eduard, velitel letadea IL-18;
STRAZNIK, Roman, starsi navigator; KRJUKOV, Alexandr, pilot-instruktor

Analysis of flights. Letecky obzor 6 no.4:98-102 Ap '62.

VARTEPETOVA, V. G., Cand. Medic. Sci. (diss) "Architectonics of Vessels of Umbilical Cord and Placenta," Voronezh, 1961, 18 pp. (Voronezh Med. Inst. (200 copies) (KL Supp 12-61, 283).

VARTERESEVICH, A.A.; PIOTROVSKIY, G.L.

Crystallographic research on Transcarpathian "wolnyn." Min.sbor.
no.5:37-49 '51. (MLRA 9:12)

1. Gosuniversitet imeni Ivana Franko, L'vov.
(Transcarpathia--Barite)

VARTERESEVICH, A.A.

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26541.

Author : Varteresevich, A.A.
Inst : Geological Society at Lvov University.
Title : Gangue Barytes from Kaolin Occurrence near Beregovska Mountain in Transcarpathia.

Orig Pub : Mineralog. sb. L'vovsk. geol. o-vo pri un-te, 1956, No. 10, 251 - 262.

Abstract : The gangue barytes (I) in kaolinized rocks was studied by the microscopic, goniometric, chemical and spectroscopic methods and a comparison of its properties with those of volnite (II) (a rare crystallographic variety of barytes from alunitized rocks of the same occurrence) was carried out. The chemical composition of I is (in %): SO₃ - 34.61, BaO - 63.58, SrO -1.59, CaO - 0.08, loss after calcination - 0.06,

Card 1/2

USSR/Cosmochemistry. Geochemistry. Hydrochemistry.

Abs **APPROVED FOR RELEASE: 08/31/2001** Ref Zhur - Khimiya, No. 8, 1957, 26541. **CIA-RDP86-00513R001858710015-5"**

total - 99.92. The spectral analysis discovered $n \times 10^{-1}$ % of Pb in II (missing in I) and only traces of Sr and Ca. The study of inclusions of the mineral-producing medium showed that the separation of I was connected with epithermal solutions (140 to 160°), and the separation of II was connected with cold solutions during the last stage of the formation of minerals.

Card 2/2

VARTERESYAN, V.A.

New method for making patterns for shoe-upper leather linings.
Kozh.-obuv.prom. 2 no.9:40-41 S '60. (MIRA 13:10)

1. Glavnyy model'yer Tsentral'noy laboratorii Tashkentskogo
sovnarkhoza.

(Shoe manufacture)

VARTERESYAN, V.A.

Standardized vamp for various types of shoes. Kozh.-obuv.prom. 3
no.7:35 J1 '61. (MIRA 14:9)

(Shoe manufacture)

VARTERESYAN, V. A.

Stitched and cemented toddler shoes. Kozh. obuv. prom. 5
no. 12:28-29 D '63. (MIRA 17:5)

VARTEGESZ, V. 1947

"Experimental Studies on the Antiphlogistic Effects of X-rays."

Orvosok Lapja, 1947, 3/38(1579-85)
Abst: Exc. Med. 11, Vol. 11, No. 2, p. 159

VARTERESZ V., GYENES G.

A daganatos betegségek elhanyagolásának okaiajak-, bő-,
emő-, és végbélrakai esetek alapján. /Causes of neglect in
lip, skin, breast, and rectal cancer/ Orv. hetil., Budap.
92:24, 17 June 51 p. 770-7.

1. Doctors.
2. Lorand Eotvos State Radium and Roentgen
Institute (Director--Prof. Dr. Bela Wald).
CIML Vol. 20, No. 10 Oct 1951

WALD, B.; VARTERESZ, V.; BOZOKY, L.

Role of body position in the general effect of Roentgen ray following treatment of the entire body. *Magy.radiol.* 3 no.1:41-43 1951. (CML 20:5)

1. State Lorand Eotvos Radium and Roentgenological Institute (Director--Dr.Professor Bela Wald).

VARTERESZ, V.

REV, K.; REV, L.; VARTERESZ, V.

Changes in alkaline phosphatase activity in the organs of rat killed with roentgen rays. Kiserletes orvostud. 3 no.6:444-447 1951.
(CIML 21:4)

1. Doctors. 2. Laboratory of Pathological Histology, Lorand Eotvos State Radium and Roentgen Institute.

Excerpta Medica Sec: 16 Cancer Vol.2/1 Jan 54

82. VARTERESZ V. and WALD B. *Changes in the biological properties of transplantable rat carcinoma (Guérin carcinoma) (Russian text)* Acta med. Acad. scient. hungar. 1953, 4/2 (171-176) Graphs 2 Tables 2

Investigations were made on 156 rats including 57 controls; 41 rats were submitted to X-ray treatment before inoculation; their tumours were implanted in 58 other animals. Metastatic growth was more frequently observed following X-ray treatment; this also held true for the transplanted tumours. This led to the conclusion that there exist close relationships between the neoplasm and the organism, which are referred to as a 'dialectic entity' - in contradiction to the generally accepted autonomy of neoplasms. It is even contended that hereditary tumour properties are subject to biological changes.

Brandt - Berlin

EXCERPTA MEDICA Sec.16 Vol.4/4 Cancer April 50

1301. VÁRTERESZ V. and KÁLMÁN E. Országos Onkol. Intézet Sugárbiol. Osztálya. Antihistaminhatás szerepe nagydosisu rontgen egésztest-besugárzásnál
Antihistamine effects and total body irradiation with high dosage of X-rays Kísérl. Orvostud. 1955, 7/1 (53-56) Tables 1

Desensitization of rabbits and guinea-pigs to histamine by immunization with histamine-azoprotein did not decrease the mortality of animals exposed to a total body irradiation slightly above the half-lethal dose. Rozsa - Buffalo, N.Y.

VARTERESZ, V.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4349. VÁRTERÉSZ V., FRÁTER I., KÁLMAN E. and WALD B. Onkol. Int. Sugárbiol. Osztálya, Országos. *Kutyák plasma- és vértérfogatának viselkedése LD₅₀ feletti röntgen egésztestbesugárzás után. Plasma and blood volume of dogs after whole body X-ray irradiation with doses above LD₅₀ KISÉRL. ORVOSTUD. 1956, 8/1 (12-21) Graphs 1 Tables 3

Irradiation with lethal doses caused a decrease in blood and plasma volume 4-6 days before death. The decrease in plasma volume was relatively greater than that of blood volume. The cause of this decrease is presumably the change in capillary permeability. In terminal stages an increase of blood and plasma volume was sometimes observed. Bálint - Budapest

VÁRTERÉSZ V.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4350. VÁRTERÉSZ V., FRÁTER I. and WALD B. Onkol. Int. Sugárbiol. Osztálya, Országos.*Kutyák extracellularis folyadékterének (sulfocyanid-terének) viselkedése LD₅₀ feletti röntgen egésztestbesugárzás után. Extracellular volume (thiocyanate space) of dogs after whole-body X-ray irradiation with doses above LD₅₀ KISÉRL. ORVOSTUD. 1956, 8/1 (34-39) Graphs 1 Tables 1

After irradiation of dogs with doses of 400, 500 and 600 r., the ECF volume, measured by the SCN-space technique, did not change in relation to body weight. This finding is in contrast with the authors' previous report, in which a decrease of blood and plasma volume was described under similar conditions. It is concluded that permeability of the capillary wall is increased, whereas the fluid escaping from the vascular bed remains in the interstitial spaces.

Bálint - Budapest

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CIA-RDP86-00513R001858710015-5"

VARTERESZY, Vilmos, Dr.

Injurious effects of ionizing radiations. I. Radiations and their biological effects in general. Orv. hetil. 99 no.10:337-343 9 Mar 58.

1. A Kozponti Sugarbiologiai Kutato Intezet (vezeto: Varteresz Vilmos dr.) kozlemenye.

(RADIATIONS, eff.

biol., of various types of ionizing radiations (Hun))

VARTHERSZ, Vilmos

Injurious effects of ionizing rays. II. Hereditary injuries, radiation energetics. Orv. hetil. 100 no.6:206-209 8 Feb 59.

1. A Kozponti Sugarbiologiai Kutato Intezet (igazgato: Varteresz Vilmos dr.) kozlomenye.

(RADIATIONS, inj. eff.

genetic damages, dos. dependence of extent of mutations (Hun))

(GENETICS

genetic damages caused by ionizing radiations, dos. dependence of extent of mutations (Hun))

VARTERESZ, Vilmos, dr., az orvostudományok kandidátusa

Dangers of nuclear tests as seen in most recent scientific achievements. Term tud kozl 4 no. 9: 385-388 S '60.

1. Director, Central Institute of Radiobiology; member, Presidium of National Peace Council.

ELEK, Tibor, dr., egyetemi tanar; VADASZ, Elemer, dr., ketazeres Kossuth-dijas akademikus, egyetemi tanar; TORO, Imre, dr., Kossuth-dijas akademikus, egyetemi tanar; AUJESZKY, Laszlo, dr., a fizikai tudomanyok kandidatusa; VARTERESZ, Vilmos, dr.; DOMBAI, Tibor; ALMAR, Ivan, dr., a fizikai tudomanyok kandidatusa

Hungarian scientists' views on the high-atmospheric nuclear tests. Term tud kozl 6 no.8:337-339 Ag '62.

1. Budapesti Muzsaki Egyetem tudomanyos rektorhelyettese (for Elek).
2. Budapesti Orvostudomanyi Egyetem rektora, es "Termeszettudomanyi Kozlony" szerkeszto bizottsagi elnoke (for Toro).
3. Orszagos Meteorologiai Intezet tudomanyos osztalyvezetoje, es "Termeszettudomanyi Kozlony" szerkeszto bizottsagi tagja (for Aujeszky).
4. Frederic Joliot-Curie Kozponti Sugarbiologiai Kutato Intezet igazgatoja, az Orszagos Beketanacs Elnoksegenek tagja (for Varteresz).
5. Magyar Allami Eotvos Lorand Geofizikai Intezet igazgatoja (for Dombai).
6. Tudomanyos Ismeretterjeszto Tarsulat Budapesti csillagaszati es urhajozasi szakostalyanak elnoke (for Almar).

KALMAN, Erzsebet; ANTONI, F.; VARTERESZ, V.

Immunological activity of ribonucleoproteins. I. Factors influencing the antigen-antibody reaction. Acta microbiol. acad. sci. hung. 9 no.4:341-348 '62.

1. "Frederic Joliot-Curie" Research Institute for Radiobiology and Radiohygiene (Director: V. Varteresz), Budapest.
(NUCLEOPROTEINS) (ANTIGEN-ANTIBODY REACTIONS)

HUNGARY

KALMAN, E., ANTONI, F., and VARTERESZ, V., of the "Frederic Joliot-Curie" Research Institute for Radiobiology and Radiohygiene (Director: V. VARTERESZ), Budapest [Original version not given].

"Immunological Activity of Ribonucleoproteins. I. Factors Influencing the Antigen-Antibody Reaction"

Budapest, Acta Microbiologica Academiae Scientiarum Hungaricae, Vol 9, No 4, 1962/63; pp 341-348.

Abstract [Authors' English summary]: Specific antibodies have been produced in rabbits with RNA-RNP preparations obtained from guinea-pig liver. The antigen-antibody reaction was estimated quantitatively by measuring the optical densities at 260 and 280 m μ . During the time and under the temperature required for precipitations, the RNA-RNP antigen is decomposed spontaneously. A decomposing action was exercised also by the nuclease system in the serum. When studying the immunobiological activity of RNA-RNP antigen-antibody systems, the role of some factors negligible in the case of other antigens should be considered. [30 references, mainly Western]. [Article in English].

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HIDVEGI, E.J.; LONAI, P.; ANTONI, F.; UNGER, E.; VARTERESZ, V.

Oncogenic deoxyribonucleoprotein and deoxyribonucleic acid
isolated from ascites tumour cells. Neoplasma 10 no.4:361-364
'63.

1. "Frederic Joliot-Curie" National Research Institute for
Radiobiology and Radiohygiene, Budapest XXII, Hungary.

(NUCLEOPROTEINS) (CARCINOGENS)

(LEUKEMIA, EXPERIMENTAL)

(CARCINOMA, EHRLICH TUMOR)

(DNA, NEOPLASM)

(LEUKEMIA, LYMPHOCYTIC)

UNGER, E.; LONAI, P.; HIDVEGI, E.; ANTONI, F.; VARTERESZ, V.

Pathological observations on mice treated with preperates isolated from ascites tumour cells and on mice grafted with lymphatic cell suspensions from the so treated animals. Neoplasma 11 no.2:177-192 '64

1. Frederic Joliot-Curie National Research Institute for Radiobiology and Radiohygiene, Budapest, Hungary.

L 1982-66 EWA(j)/EWA(b)-2 RM
ACCESSION NR: AT5024290

HU/2505/64/025/002/0133/0140 22

AUTHOR: Antoni, Ferenc; Arky, Istvan; Szabo, Laszlo D.; Varteresz, Vilmos 21 BT1

TITLE: Glycerol-induced changes in the level and metabolism of nucleic acids in bone marrow cells

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 25, no. 2, 1964, 133-140

TOPIC TAGS: nucleic acid, biologic metabolism, bone marrow, cytology, radiation biologic effect

ABSTRACT: [English article, authors' English summary modified] The DNA-P content of rabbit bone marrow is 5.8×10^{-7} microgram/cell. The corresponding value for RNA-P is 3.9×10^{-7} microgram/cell and the ratio of RNA to DNA is 0.67. Glycerol, in concentrations of 5 per cent and more, markedly decreased the RNA content of bone marrow cells but had no influence on the DNA level. Glycerol treated cells continued to incorporate both C^{14} -formate and p^{32} into RNA and DNA even though the rate of incorporation was considerably decreased. Washing procedures further decreased the ability of glycerol-

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ACCESSION NR: AT5024290

treated cells to incorporate radioactive isotopes. The ratio of RNA to DNA, in glycerol-treated cells, underwent an unusually rapid decrease during incubation. By increasing the glycerol concentration up to 40 per cent, both purified and cytoplasm-contaminated nuclei could be isolated.

Orig. art. has: 2 figures, 3 graphs, 1 table.

ASSOCIATION: Frederic Joliot-Curie National Research Institute for Radiobiology and Radiohygiene, Budapest

ASUBMITTED: 00

ENCL: 00

SUB CODE: LS

NR REF SOV: 00

OTHER: 030

JPRS

Card 2/2 *AP*

VARTERESZ, Vilmos, az orvostudományok kandidátusa

Present state of radiobiological research in Hungary. Magyar Tudomány 71 no.10:624-627 0 '64.

1. Director, National Frederic Joliot-Curie Research Institute of Radiobiology and Radiohygiene, Budapest.

L 13516-66 EWA(j)/EWT(m)/T/EWA(b)-2 JK

ACC NR: AP6006886

SOURCE CODE: HU/0036/65/012/001/0059/0062

AUTHOR: Varteresz, Vilmos--Varteres, V. (Candidate of medical sciences; Director)

ORG: National "Frederic Joliot Curie" Research Institute of Radiobiology and Radiation Hygiene (Orszagos "Frederic Joliot-Curie" Sugarbiologiai es Sugaregeszsegugyi Kutato Intezet)

53
B

TITLE: Third Congress of the Hungarian Biophysical Society

SOURCE: Magyar tudomany, v. 72, no. 1, 1965, 59-62

TOPIC TAGS: biologic conference, biophysics, radiobiology, radiation biologic effect, radiation protection, cell physiology, hygiene, myology, immunity, biologic research facility

ABSTRACT: The article is a report of the meeting, held 26-28 Aug 64, in Budapest. A report on the projects and tasks of the Hungarian Biophysical Society was given by ERNST, Jeno, president of the society. There were 49 lectures, given by members of the Institute of Biophysics of the Medical University of Pecs (16), National FJC Research Institute of Radio-

biology and Radiation Hygiene (16), and other institutes. Several of the lectures dealt with the biophysics of muscle, and biological information and radiation effect. Some lectures discussed membrane function, structure research, model experiments for the study of the transmission of pressure in biological tissues, radiation protection, the influence of an electrostatic field on the rate of growth of E. coli, and the effect of ionizing radiation

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ACC NR: AP6006886

on humoral immunity. The names of the authors are presented with very brief description of some of the lectures. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2

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